



**ASTM D6938 In-Place Density and Water Content of Soil and
Soil-Aggregate by Nuclear Methods (Shallow Depth)**

**Project: FTW 405 Range Control
Fort Wainwright, AK
Client: Cornerstone General Contractors**

**Project #: 2025-091
Date: October 15, 2025
Area Tested: Range Control/ Ammo Break Down**

Material / Source:
Pitrun/ Range Pit 146.1

**Gauge: Instron 3500 Ser: # 1903
Operator: John Trush**

Test #	Soil Type	Test Depth(in)	Lift Elev	Location	Wet Density	% Moist.	Dry Density	Max Density	Percent Density	Required Density
1	pitrun	6	1	Range Control Interior Foundation Backfill (see map)	147.5	6.2	138.9	146.1	95.1%	95%
2	pitrun	6	1	Range Control Interior Foundation Backfill (see map)	147.7	4.9	140.8	146.1	96.4%	95%
3	pitrun	6	2	Range Control Interior Foundation Backfill (see map)	147.2	5.3	139.8	146.1	95.7%	95%
4	pitrun	6	2	Range Control Interior Foundation Backfill (see map)	147.0	5.6	139.2	146.1	95.3%	95%
5	pitrun	6	1	Ammo Break Down Canopy Backfill (see map)	148.2	6.1	139.7	146.1	95.6%	95%
6	pitrun	6	2	Ammo Break Down Canopy Backfill (see map)	146.8	5.2	139.5	146.1	95.5%	95%
7	pitrun	6	1	Range Control Tower Exterior Foundation Backfill (see map)	151.0	5.0	143.8	146.1	98.4%	95%
8	pitrun	6	1	Range Control Tower Exterior Foundation Backfill (see map)	148.0	6.0	139.6	146.1	95.6%	95%
9	pitrun	6	1	Range Control Tower Exterior Foundation Backfill (see map)	148.7	5.3	141.2	146.1	96.7%	95%



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Test #	Soil Type	Test Depth(in)	Lift Elev	Location	Wet Density	% Moist.	Dry Density	Max Density	Percent Density	Required Density
10	pitrun	6	1	Range Control Tower Exterior Foundation Backfill (see map)	145.4	4.5	139.1	146.1	95.2%	95%
11	pitrun	6	3	Ammo Break Down Canopy Backfill (see map)	148.9	6.4	139.9	146.1	95.8%	95%
12	pitrun	6	4	Ammo Break Down Canopy Backfill (see map)	150.1	5.7	142.0	146.1	97.2%	95%
13	pitrun	6	2	Range Control Tower Exterior Foundation Backfill (see map)	147.2	6.0	138.9	146.1	95.0%	95%
14	pitrun	6	2	Range Control Tower Exterior Foundation Backfill (see map)	151.9	5.3	144.3	146.1	98.7%	95%
15	pitrun	6	2	Range Control Tower Exterior Foundation Backfill (see map)	150.0	6.6	140.7	146.1	96.3%	95%
16	pitrun	6	2	Range Control Tower Exterior Foundation Backfill (see map)	150.1	5.7	142.0	146.1	97.2%	95%

Approved By: Stefan Mack Stefan Mack PE, Lab Manager

